

IN THE CLAIMS:

Kindly cancel claims 1-33 without prejudice or admission and add new claims 34-66 as shown in the following listing of claims, which replaces all previous listings and versions of claims in this application.

1. - 33. (canceled).

34. (new) A living body information detection system, comprising:

a living body information detection unit comprising at least one living body information detecting sensor for detecting a living body information signal of a wearer, and means for transmitting living body information data;

a living body information monitoring unit comprising means for receiving the living body information data transmitted by the living body information detection unit, a storage device for storing the living body information data for a predetermined time, and means for transmitting the living body information data through a public line;

a host server comprising means for receiving the living body information data transmitted by the living body information monitoring unit, and at least one of a storage device for storing the living body information data and a display device for displaying the living body information data; and

control means for controlling the living body information detection unit after the living body information detection unit has detected the living body information signal.

35. (new) A living body information detection system, comprising:

a living body information detection unit comprising at least one living body information detecting sensor for detecting a living body information signal of a wearer, and means for transmitting living body information data;

a living body information monitoring unit comprising means for receiving the living body information data transmitted by the living body information detection unit, a storage device for storing the living body information data for a predetermined time, means for transmitting the living body information data through a public line, and means for transmitting control data to the living body information detection unit to control the at least one living body information detecting sensor after receiving the living body information data from the living body information detection unit; and

a host server comprising means for receiving the living body information data transmitted by the living body information monitoring unit, and at least one of a storage

device for storing the living body information data and a display device for displaying the living body information data.

36. (new) A living body information detection system according to claim 35; wherein the living body information detection unit further comprises

an A/D converter unit for converting an analog living body signal output by the at least one living body information detecting sensor into a digital living body signal;

a living body digital signal control unit for processing and controlling the digital living body signal to produce first processed data;

a first memory unit comprising a ROM for storing data having a data structure comprised of at least one of wearer identification information for identifying the wearer, a living body information operational expression, and living body information detection unit identification information for identifying the living body information detection unit, and a RAM for storing living body digital data comprised of the digital living body signal or the first processed data for a predetermined time;

a living body information detecting sensor control unit for controlling the at least one living body information

detecting sensor based on the control data received from the living body information monitoring unit or control content set by the wearer;

a living body information data transmitter/receiver unit for transmitting or receiving data to or from the living body information monitoring unit; and

a first central processing unit for controlling the A/D converter unit, the first memory unit, the living body digital signal control unit, the living body information sensor control unit, and the living body information data transmitter/receiver unit.

37. (new) A living body information detection system according to claim 36; wherein the living body information detection unit further comprises

a first living body information data judging unit for comparing the digital living body signal with a preset value range and outputting a comparison result; and

a living body information detecting sensor control unit for controlling the at least one living body information detecting sensor based on the control data received from the living body information monitoring unit, the comparison result output by the first living body information data judging unit, or the control content set by the wearer.

38. (new) A living body information detection system according to claim 37; wherein the living body information detection unit selects a first living body information detecting sensor from the at least one living body information detecting sensor based on an output result from the first living body information data judging unit, and transmits the selection result to the living body information monitoring unit through the living body information data transmitter/receiver unit.

39. (new) A living body information detection system according to claim 37; wherein the living body digital signal control unit comprises

living body digital data processing means for performing data processing on the digital living body signal; and

normal-time living body information transmitting means for storing the processed data obtained by the living body digital data processing means or digital living body data comprised of the digital living body signal stored in the RAM for a predetermined time, and transmitting first normal-time transmission data comprised of at least one of the living body digital data and the wearer identification information to the living body information monitoring unit at a predetermined timing or when receiving a polling command transmitted by the living body information monitoring unit.

40. (new) A living body information detection system according to claim 39; wherein the living body information detection unit further comprises abnormal-time living body information transmitting means for

outputting an abnormality signal indicating an abnormality from the first living body information data judging unit of the living body information detection unit when a value of the living body digital data is judged to be outside the preset value range in the first living body information data judging unit, and immediately transmitting first abnormal-time transmission data comprised of the abnormality signal, the wearer identification information, and the living body digital data, and

deleting the abnormal-time transmission data, or storing the abnormal-time transmission data in the RAM for a predetermined time, and at a predetermined timing or when receiving the polling command transmitted by the living body information monitoring unit, transmitting the first normal-time transmission data to the living body information monitoring unit when the value of the living body digital data is judged to be within the preset value range in the first living body information data judging unit.

41. (new) A living body information detection system according to claim 35; wherein the at least one living

body information detection sensor comprises at least one normal-time driving living body information detecting sensor that is driven during normal conditions, and at least one power-save living body information detecting sensor that is placed in a power-save state with no power supplied thereto during normal conditions.

42. (new) A living body information detection system according to claim 41; wherein the living body information monitoring unit comprises

a second transmitter/receiver unit for transmitting/receiving the living body information data to/from the living body information detection unit;

a living body digital signal processed data preparing unit for processing the living body digital data corresponding to each living body information detecting sensor to produce second living body digital signal processed data;

a second memory unit comprising a ROM for storing data with a data structure comprised of at least one of living body information monitoring unit identification information for identifying the living body information monitoring unit, an operational expression for data processing, a value range preset for the living body information data received from each living body information detecting sensor or second living body information data comprised of the second living body digital

signal processed data, and a table for identifying the wearer based on the wearer identification information that is stored in the ROM of the living body information detection unit, and a RAM for storing the second living body information data for a predetermined time;

a second living body information data judging unit for judging a control method for the living body information monitoring unit such that when first abnormal-time transmission data transmitted by the living body information monitoring unit is received, the second living body information data is compared with the preset value range stored in the ROM for judgment;

a first living body information detection unit control unit for preparing living body information detection unit control data for controlling the living body information detection unit based on a judgment result from the second living body information data judging unit;

a first public line connecting unit for connecting to the host server through the public line; and

a second central processing unit for controlling the second transmitter/receiver unit, the second memory unit, the second judging unit, the second signal control unit, the first living body information detecting terminal control unit, and the first public line connecting unit.

43. (new) A living body information detection system according to claim 42; wherein

when the second living body information data is judged as being outside the value range preset by the second living body information data judging unit, the living body information monitoring unit transmits a signal indicating an abnormality and second abnormal-time transmission data comprised of the wearer identification information, the living body information detecting unit identification information, and the second living body information data, to the host server through the first public line connecting unit; and

when the second living body information data is judged as being within the value range preset by the second living body information data judging unit, the living body information monitoring unit stores the second living body information data in the RAM for a predetermined time, and at a predetermined timing or in accordance with reception of a polling command received from the host server, transmits second living body information data stored in the RAM and second normal-time transmission data comprised of the wearer identification information and the living body information detecting terminal identification information, to the host server through the first public line connecting unit.

44. (new) A living body information detection system according to claim 43; wherein the first living body information detecting terminal control unit further comprises

first sensor operation verification signal generating means for generating a verification signal that serves to regularly verify a breakdown condition or a drive condition of each living body information detecting sensor within the living body information detecting unit; and

first drive condition judging means for judging the breakdown condition or the drive condition of the at least one living body information detecting sensor from the living body information detecting sensor operation verification result signal after the living body information detecting sensor control unit of the living body information detecting unit verifies a breakdown condition or a drive condition of each living body information detecting sensor in response to the verification signal and receives a sensor operation verification result signal to be transmitted.

45. (new) A living body information detection system according to claim 43; wherein the host server comprises

a third memory unit comprising a ROM in which the wearer identification information transmitted by the living body information monitoring device, a table for identifying

the wearer from the living body information monitoring device identification information, and the polling timing are stored, and a RAM for storing second living body information data transmitted by the living body information monitoring device;

a second public line connecting unit for receiving the second normal-time transmission data or the second abnormal-time transmission data that are transmitted by the living body information monitoring device through the public line, and transmitting a polling command to the living body information monitoring device at the polling timing previously stored in the ROM of the host server;

a display unit for displaying the second normal-time transmission data or the abnormal-time transmission data received from the living body information monitoring device;

a third signal control unit for performing signal control by determining whether the second normal-time transmission data or the abnormal-time transmission data that are received from the living body information monitoring device are stored in the memory unit or displayed on the display unit;

a second living body information detecting unit control unit for generating a signal for controlling the living body information detecting terminal; and

a third central processing unit for controlling the third memory unit, the second public line connecting unit, the display unit, the third signal control unit, and the second living body information detecting terminal control unit.

46. (new) A living body information detection system according to claim 45; wherein the second living body information detection terminal control unit comprises

the second determining means for determining one of a first living body information detection sensor that is driven during normal conditions and a second living body information detection sensor that is in a power-save state with no power supply or is intermittently driven during normal conditions from the at least one living body information detection sensor of the living body information detecting unit based on identification information specific to the living body information monitoring device and wearer identification information received by the second public line connecting unit; and

second control signal generating means for generating a sensor control signal that is transmitted directly to the living body information detecting unit or transmitted to the living body information monitoring device.

47. (new) A living body information detection system according to claim 46; wherein the second living body information detecting unit control unit further comprises

a second living body information detection sensor operation verification signal generating means for generating a verification signal that serves to regularly verify a breakdown condition or a drive condition of each living body information detecting sensor included in the living body information detecting unit; and

a second drive condition judging means for judging the breakdown condition or the drive condition of the sensor from the living body information detecting sensor operation verification result signal after the living body information detection sensor control unit of the living body information detecting unit verifies a breakdown condition or a drive condition of each living body information detection sensor in response to the operation verification signal and receives a living body information detection sensor operation verification result signal to be transmitted.

48. (new) A living body information detection system according to claim 47; wherein the first judging unit of the living body information detecting unit or the second judging unit of the living body information monitoring device judges the output signal to be abnormal when an output signal

from the first living body information detection sensor exceeds a preset reference value range or a difference with respect to an output signal previously output by the living body information detection sensor exceeds a preset variation range.

49. (new) A living body information detection system according to claim 43; wherein the second living body information data judging unit determines an abnormal level taking as a criterion at least one of a type of the living body information detecting sensor exhibiting an abnormality and a difference of the second living body information data from the preset value range in the living body information monitoring unit when the second living body information data is judged as being outside the value range preset by the second living body information data judging unit;

the living body digital signal processed data preparing unit adds an abnormality signal corresponding to the abnormal level to the second abnormal-time transmission data; and

the second transmitter/receiver unit transmits the second abnormal-time transmission data.

50. (new) A living body information detection system according to claim 43; wherein the first living body

information detection unit control unit comprises first sensor determining means for determining and selecting one of a first normal-time driving living body information detecting sensor and a second living body information detecting sensor that is either in a power-save state with no power supplied during normal conditions or is intermittently driven based on the wearer identification information received from the second transmitter/receiver unit; and the first living body information detection unit control unit transmits the second abnormal-time transmission data to the living body information detecting terminal based on a determination result from the sensor determining means.

51. (new) A living body information detection system according to claim 50; wherein the first living body information detection unit control unit further comprises

first determining means for selecting and determining the living body information detecting sensor to be driven from the second living body information detecting sensors that are in a power-save state during normal conditions when the second transmitter/receiver unit receives the first abnormal-time transmission data from the living body information detecting terminal; and

first control signal generating means for generating a signal that drives the selected second living body information detecting sensor.

52. (new) A living body information detection system according to claim 43; wherein the first living body information detection unit control unit comprises

first determining means for determining and selecting a living body information detecting sensor to be changed in at least one of a measuring interval, a measuring time, and a data sampling frequency from living body information detecting sensors that are intermittently driven during normal conditions within the living body information detecting unit when the second transmitter/receiver unit receives the first abnormal-time transmission data from the living body information detection unit; and

first control signal generating means for generating a signal for changing at least one of the measuring interval, the measuring time, and the data sampling frequency of the selected living body information detecting sensor based on an output of the first determining means.

53. (new) A living body information detection system according to claim 52; wherein the living body information sensor control unit of the living body information detection unit or the first living body information detection unit control unit of the living body information monitoring unit decreases a measuring interval of the selected living body information detecting sensor to be shorter than a

measuring interval required during normal conditions when an output of a first living body information detecting sensor is judged as being outside the preset value range.

54. (new) A living body information detection system according to claim 52; wherein the living body information sensor control unit of the living body information detection unit or the first living body information detection unit control unit of the living body information monitoring unit increases a measuring time of the selected living body information detecting sensor to be longer than a measuring time required during normal conditions when an output from a first living body information detecting sensor is judged as being outside the preset value range.

55. (new) A living body information detection system according to claim 52; wherein the living body information sensor control unit within the living body information detection unit or the first living body information detection unit control unit of the living body information monitoring unit increases a data sampling frequency of the selected living body information detecting sensor to be higher than a data sampling frequency required during normal conditions when an output of a first living body information detecting sensor is judged as being abnormal.

56. (new) A living body information detection system according to claim 52; wherein the living body information sensor control unit of the living body information detection unit or the first living body information detection unit control unit of the living body information monitoring unit controls the selected living body information detecting sensor to return to a preset reference control state when an output of a first living body information detecting sensor is judged as being outside the preset value range by the first judging unit or the second judging unit, and the output from the first living body information detecting sensor is again judged as being within the preset value range with respect to the selected living body information detecting sensor in which at least one of the measuring interval, the measuring time, and the data sampling frequency is controlled.

57. (new) A living body information detection system according to claim 42; wherein the living body information monitoring unit further comprises a call button that controls sensor operation when pressed.

58. (new) A living body information detection system according to claim 35; wherein the living body information monitoring unit performs a sensor operation control in response to a signal detected by the living body information detection unit.

59. (new) A living body information detection system according to claim 41; wherein the living body information sensor control unit supplies power to drive the at least one power-save living body information detecting sensor when an output value of the first living body information data judging unit is an abnormal output value.

60. (new) A living body information detection system according to claim 35; wherein the at least one living body information detecting sensor comprises at least one normal-time driving living body information detecting sensor that is continuously driven during normal conditions, and at least one power-save living body information detecting sensor that is intermittently driven during normal conditions.

61. (new) A living body information detection system according to claim 60; wherein the living body information sensor control unit performs control by a control method based on at least one of a measuring interval, a measuring time, and a data sampling frequency for an intermittently driven power-save living body information detecting sensor when an output value of the first living body information data judging unit is an abnormal output value.

62. (new) A living body information detection system according to claim 35; wherein the living body

information detection unit further comprises a call button that controls sensor operation when pressed.

63. (new) A living body information detection system according to claim 35; wherein the living body information detection unit transmits the living body information data to the living body information monitoring unit based on the living body information signal detected by the at least one living body information detecting sensor, or controls the at least one living body information detecting sensor by itself.

64. (new) A living body information detection system according to claim 35; wherein the at least one living body information detecting sensor includes a sensor for detecting a pulse.

65. (new) A living body information detection system according to claim 35; wherein the at least one living body information detecting sensor includes a sensor for detecting a blood sugar level or a blood glucose concentration.

66. (new) A living body information detection system according to claim 35; wherein the at least one living body information detecting sensor is a sensor for detecting a moving state of the wearer.